

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) **MAIL STOP AF**
Raiko Milanovic et al.)
Application No.: 10/590,650) Group Art Unit: 2618
Filed: April 19, 2007) Examiner: Yuwen Pan
For: ARRANGEMENT OF APPLIANCES) Confirmation No.: 2157
FOR PROCESS CONTROL)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully requests review and withdrawal of the final rejection of claims 1-9 as set forth in the final Office Action dated April 27, 2010. Claims 1 and 9 are independent. This Request is being filed with a Notice of Appeal.

I. Rejections Under 35 U.S.C. § 102(b)

Claims 1-9 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Canada et al. (U.S. 6,301,514, hereinafter "Canada"). This rejection is legally and factually erroneous.

In order to properly anticipate a claimed invention under 35 U.S.C. § 102, the identical invention must be shown in as complete detail as contained in the claim. See *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP 2131. In addition, it is well-settled that the elements must be arranged in the single prior art reference as required by the claimed invention. See *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); *Brown v. 3M*, 60 USPQ2d 1375 (Fed. Cir. 2001); MPEP 2131. Accordingly, anticipation under § 102 can be found only if a reference shows exactly what is claimed, in as complete detail as contained in the claim, and in the same arrangement as contained in the claim. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

Canada does not disclose all the recited features of the claimed invention for at least the following reasons.

An exemplary embodiment of the present invention provides an arrangement and system which includes at least first and second applications of a technical process. According to the exemplary embodiment, each appliance is one of a process measurement device and a process actuator. As described, for example, at the second full paragraph on page 2 of the specification, two different appliances can directly communicate to diagnose each other's operation, without involving a central process control point. When communication by either appliance with the central control point is desired, a common transmitter/receiver that is shared by the appliances can be used. For example, with reference to Applicants' Figure 1, a second appliance 2b can be a valve that has been requested to close. A first valve 2a can be monitored to determine whether a "zero" flow condition exists following the command to close valve 2b.

Information at valve 2a can be fed to valve 2b, as diagnostic information, without either valve communicating with the central process control point 4. However, if either or both of valves 2a and 2b are to communicate with the central point 4, such communication can be by way of a common transmitter/receiver 3. As such, overall communication efficiency can be realized with only a single transmitter/receiver (as opposed to having a dedicated transmitter/receiver for each appliance as in the prior art Figure 2 illustration).

Such features are encompassed by independent claims 1 and 9, and are not disclosed by Canada.

Claim 1 recites an arrangement in which the first appliance communicates with the second appliance to pass diagnostic information relating to operation of the second appliance to the second appliance. Claim 1 also recites a transmitter/receiver connected to the second appliance, for data interchange with a central point of the technical process, and for calling up data from the second appliance to transmit to the central point. Similar features are recited in independent claim 9. Claim 9 also recites a common transmitter/receiver for multiple appliances of a technical process

With reference to Figure 1, Canada discloses a wireless monitoring system in which machine monitors 4a-4i are each respectively wirelessly connected to a repeater 8, which is in turn connected to a command station 6. The repeaters 8

function to facilitate communication between the machine monitors 4 and the command station 6 (see Column 6, lines 39-65, and Column 7, lines 2-9). The machine monitors 4 contain a sensor 408 for measuring desired machine characteristics of the machine monitors 4 (see Column 7, lines 20-34). Canada discloses that the machine characteristics measured by a machine monitor 4 are communicated wirelessly to a repeater 8, and the repeater 8 forwards the information to the communication station 6.

In rejecting the claimed invention, the Examiner alleged that the machine monitors 4 of Canada correspond to the first appliance as recited in claims 1 and 9, that the repeaters 8 of Canada correspond to the second appliance as recited in claims 1 and 9, and that the command station 6 of Canada corresponds to the central point as recited in claims 1 and 9. This assertion is not supportable.

Claims 1 and 9 recite the appliances (first and second appliances) are each one of a process measurement device and a process actuator. At no point does Canada disclose or suggest that the repeaters 8 are a process measurement device or a process actuator in a technical process. The repeaters 8 of Canada are merely communication interfaces between the machine monitors 4 and the communication station 6. Accordingly, the repeaters 8 of Canada do not constitute either a process measurement device or a process actuator in a technical process.

Furthermore, claims 1 and 9 recite that the first appliance communicates with the second appliance to pass diagnostic information relating to operation of the second appliance to the second appliance. On the contrary, Canada discloses that the machine characteristics measured by a machine monitor 4 are communicated wirelessly to a repeater 8, and that the repeater 8 forwards the communicated machine characteristics of the machine monitor 4 to the communication station 6. The machine characteristics measured by the machine monitors 4 do not correspond to diagnostic information relating to operation of the repeater 8.

Canada discloses that an installation and control unit (ICU) 9 can be integrated in the machine monitors 4 and/or repeater 8. The ICU 9 is a user-operated computing device to accommodate transmission and reception of wireless signals (see Column 11, lines 7-40, and Column 22, lines 2-14). In a process of physically mounting the repeaters 8 to ensure that the repeaters 8 are able to accurately

receive signals from machine monitors 4, an ICU 9 provided in a repeater 8 can calculate a bit error rate (BER) during a transmit routine test in which the ICU 9 of the repeater 8 transmits a transmission test signal to the machine monitor 4 to permit the machine monitor 4 to determine if it receives signals from the repeater 8 within an acceptable BER based on a transmit power level of signals from the repeater 8 (see Column 22, line 27 to Column 23, line 12). Conversely, in the process of physically mounting the repeaters 8 to ensure proper reception, an ICU 9 provided in a repeater 8 can initiate a receive routine to determine whether the repeater 8 receives signals from a machine monitor 4 within an acceptable BER based on a transmit power level of signals from the machine monitor 4 (see Column 23, lines 13-42).

The above-cited portions of Canada describe the functions of an ICU 9 as a separate component from the machine monitor 4 and repeater 8. However, based on the disclosure in Canada that an ICU 9 can be incorporated within a machine monitor 4 and/or repeater 8, the Examiner, in the Advisory Action dated August 6, 2010, interpreted the above-described disclosure of the ICU 9 as somehow meaning that a repeater 8 in which an ICU 9 is incorporated "control[s] the signal strength output of the machine monitor based on the measurement of the signal strength from the machine monitor." There is no disclosure in Canada which even remotely supports this interpretation. On the contrary, if an ICU 9 is incorporated in a repeater 8, the ICU 9 does not control the signal output strength of the machine monitor 4. Rather, an ICU 9 incorporated in the machine monitor 4 controls the signal output strength of the machine monitor 4, based on the determination of the ICU 9 in the machine monitor 4 of whether there is an acceptable BER.

Furthermore, the Examiner's reliance on the functions of the ICU 9 in measuring the BER of received or transmitted signals is erroneous. Even if Canada is interpreted as somehow disclosing that the ICU 9 incorporated in a repeater 8 can control the signal output strength of a machine monitor 4, this feature of Canada has no relationship to the recited functions of the first appliance in claims 1 and 9. Claims 1 and 9 recite that the first appliance communicates with the second appliance to pass diagnostic information relating to operation of the second appliance to the second appliance. The machine monitor 4 of Canada, which is

believed to correspond to the first appliance as recited in claims 1 and 9, does not transmit diagnostic information relating to the operation of the repeater 8 to the repeater 8, which supposedly corresponds to the second appliance as recited in claims 1 and 9. Therefore, the Examiner's reliance on the functions of an ICU 9 incorporated in a repeater 8 is inapplicable to the functions of the first appliance as recited in claims 1 and 9.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that Canada does not disclose or suggest all the recited features of claims 1 and 9.

In addition, Canada does not disclose or suggest the features of dependent claims 3 and 6, which recite that each of the appliances carry out data preprocessing and/or diagnosing functions. Furthermore, Canada does not disclose or suggest the features of claims 5 and 8, which recite that the transmitter/receiver performs analog/digital signal conversion, and/or data preprocessing. The function of the repeater 8 is merely to repeat the received signals in an amplified value. The repeater 8 does not change the content or format type of the signals received from the machine monitors 4a-4i. Accordingly, the repeater 8 of Canada does not carry out data preprocessing, diagnosing functions and/or analog/digital signal conversion.

Therefore, in addition to failing to disclose all the recited features of claims 1 and 9, Canada also does not disclose or suggest the features of claims 3, 5, 6 and 8.

II. Conclusion

For at least the foregoing reasons, as well as other reasons set forth in Applicants' prior response, the rejections contained in the final Office Action are factually and legally erroneous. Therefore, the final Office Action does not present a record that is appropriate for consideration by the Board of Appeals. Withdrawal of the final Office Action is respectfully submitted to be in order.

Respectfully submitted,

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Date: August 27, 2010

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